REMARKS

Claims 4-6, 8,14 and 17 are withdrawn. Claims 1, 10 and 16 are amended. Claims 1-3, 7, 9-11, 13, 15, 16, and 18 remain in the application.

Election of Species

1.00 *The Examiner holds that the application contains claims directed to the following patentably distinct species of the claimed invention:*

Actuator 1: gear drive

Actuator 2: screw drive

Actuator 3: belt drive

Switch Member 1: double pole double throw

Switch Member 2: momentary on/off/on momentary

Switch Mounting 1: on vehicle frame

Switch Mounting 2: on handle bar

The species are independent or distinct because they had different configurations that would require different searches.

1.10 The Examiner holds Applicant is required under 35 U.S.C. 121 to elect a single disclosed species for prosecution on the merits to which the claims shall be restricted if no generic claim is finally held to be allowable. Currently, claims 1 and 2 are generic. Applicant is advised that a reply to this requirement must include an identification of the species that is elected consonant with this requirement, and a listing of all claims readable thereon, including any claims subsequently added.

Applicant is advised that the reply to this requirement to be complete must include (i) an election of a species or invention to be examined even though the requirement be traversed (37 CFR 1.143) and (ii) identification of the claims encompassing the elected invention.

PLEASE NOTE: Applicant must elect an Actuator, a Switch Member, and a Switch Mounting.

1.20 Applicant's agent confirms the elects to prosecute the **Species:** Actuator 1: gear drive. Applicant's agent herein also elects to prosecute the **Species:** Switch Member 2: momentary on/off/on momentary. Applicant's agent herein also elects to prosecute the **Species:** Switch Mounting 2: on handle bar. Applicant's agent holds that the claims 1-3, 7, 9-11, 13, 15, 16, and 18 read on **Species:** Actuator 1: gear drive, **Species:** Switch Member 2: momentary on/off/on momentary and **Species** Switch Mounting 2: on handle bar.

1.30 Applicant's agent made the election without traverse.

Objections/Rejections
Under 35 U.S.C. § 102(b)

2.00 *The Examiner has rejected claims 1-3, 7, 10-11 and 13 as anticipated by* ***Ota et al.'046*** *(U.S. 6,117,046, September 12, 2000).*

2.10 The Examiner holds that, with regard to claim 1, ***Ota et al.'046*** teaches an electromechanical shifting apparatus for a vehicle having an electrical system and a transmission equipped with a counter shaft 10 utilizing partial rotation to shift gears, the shifting apparatus comprising;

an actuator assembly including a bidirectional, linear actuator member 3 powered by an electrical motor 1, the actuator assembly secured to a frame of the vehicle (Fig, 2);

a shift linkage 7operatively connecting the bidirectional, linear actuator member to the counter shaft of the vehicle transmission;

a wiring. harness assembly connected to the electrical system of the vehicle, the wiring harness assembly powering the electrical motor of the actuation assembly (Fig. 14/15); and

a switch member (Fig.1) interconnected with the wiring harness, the switch member including first 51 and second actuation 52 positions and an off position (neither pressed), the first actuation position 51 providing a selected current flow direction to the actuator assembly motor to

drive the linear actuator member in a first direction and the second actuation position 52 reversing the current flow direction to the actuator assembly motor relative to the selected current flow direction, thereby driving the linear actuator member in a second direction opposite the first direction.

With regard to claim 2, ***Ota et al.'046*** teaches the apparatus, wherein the actuator assembly is secured to the vehicle frame by a mounting bracket member (Fig. 2).

With regard to claim 3, ***Ota et al.'046*** teaches the apparatus, wherein the bidirectional linear actuator member includes a gear drive 2.

With regard to claim 7, ***Ota et al.'046*** teaches the apparatus, wherein the switch member includes a momentary on/off/on momentary switch member (Figs, 1/14/15).

With regard to claim 10, please see the limitations of rejected claims 1 and 3 above.

With regard to claim 11, please see the limitations of rejected claim 2 above.

With regard to claim 13, please see the limitations of rejected claim 7 above.

2.20 Applicant's agent has amended claim1 to include the limitation of... "the electromechanical shifting apparatus actuating the counter shaft without limitation of engine rpm, vehicle speed and frequency of shift cycle." This limitation serves to distinguish claim 1 over the ***Ota et al.'046*** reference.

The ***Ota et al.'046*** reference shifting mechanism include a shift disabling system (Fig. 11) for preventing the control shown in Fig. 16 from being executed at a vehicle speed equal to or higher than 10 km/h or an engine rotational speed equal to or higher than 3,000 rps even if the shift-up switch 51 has been turned on. (col.15, lines 1-40)

The electromechanical shifting apparatus of claim 1, as amended, overcomes these drawbacks of the ***Ota et al.'046*** reference by allowing actuation of the shifting apparatus without limitation of engine rpm or vehicle speed. Such freedom of operation is necessary in certain

operating conditions, such as racing application, where such shifting operations are required in order to gain a competitive advantage. This feature provides an improvement over the device of the ***Ota et al.'046*** reference, and thus, is patentably distinguished over the ***Ota et al.'046*** reference.

Applicant's agent respectfully requests that the Examiner withdraw the rejection of claim 1 under 35 U.S.C. 102 (b), in view of the amendments to this claim and the arguments presented above.

Applicant's agent holds that since claims 2, 3, 7 and 9 depend from claim 1, which is patentable, thus claims 2, 3, 7 and 9 are patentable since each recites more specific embodiments of the invention. Applicant's agent respectfully requests that the Examiner withdraw the rejection of claims 2, 3, 7 and 9 under 35 U.S.C. 102(b), in view of the amendments to claim 1 and arguments presented above.

2.30 Applicant's agent has amended claim 10 to include the limitation of... "the electromechanical shifting apparatus actuating the counter shaft without limitation of engine rpm, vehicle speed and frequency of shift cycle." This limitation serves to distinguish claim 1 over the ***Ota et al.'046*** reference.

The ***Ota et al.'046*** reference shifting mechanism include a shift disabling system (Fig. 11) for preventing the control shown in Fig. 16 from being executed at a vehicle speed equal to or higher than 10 km/h or an engine rotational speed equal to or higher than 3,000 rps even if the shift-up switch 51 has been turned on. (col.15, lines 1-40)

The electromechanical shifting apparatus of claim 10, as amended, overcomes these drawbacks of the ***Ota et al.'046*** reference by allowing actuation of the shifting apparatus without

limitation of engine rpm or vehicle speed. Such freedom of operation is necessary in certain operating conditions, such as racing application, where such shifting operations are required in order to gain a competitive advantage. This feature provides an improvement over the device of the ***Ota et al.'046*** reference, and thus, is patentably distinguished over the ***Ota et al.'046*** reference.

Applicant's agent respectfully requests that the Examiner withdraw the rejection of claim 10 under 35 U.S.C. 102 (b), in view of the amendments to this claim and the arguments presented above.

Applicant's agent holds that since claims 11, 13 and 15 depend from claim 10, which is patentable, thus claims 11, 13 and 15 are patentable since each recites more specific embodiments of the invention. Applicant's agent respectfully requests that the Examiner withdraw the rejection of claims 11, 13 and 15 under 35 U.S.C. 102(b), in view of the amendments to claim 1 and arguments presented above.

2.40 Applicant's agent has amended claim16 to include the limitation of... "the electromechanical shifting apparatus actuating the counter shaft without limitation of engine rpm, vehicle speed and frequency of shift cycle." This limitation serves to distinguish claim 1 over the ***Ota et al.'046*** reference.

The ***Ota et al.'046*** reference shifting mechanism include a shift disabling system (Fig. 11) for preventing the control shown in Fig. 16 from being executed at a vehicle speed equal to or higher than 10 km/h or an engine rotational speed equal to or higher than 3,000 rps even if the shift-up switch 51 has been turned on. (col.15, lines 1-40)

The electromechanical shifting apparatus of claim 16, as amended, overcomes these

drawbacks of the ***Ota et al.'046*** reference by allowing actuation of the shifting apparatus without limitation of engine rpm or vehicle speed. Such freedom of operation is necessary in certain operating conditions, such as racing application, where such shifting operations are required in order to gain a competitive advantage. This feature provides an improvement over the device of the ***Ota et al.'046*** reference, and thus, is patentably distinguished over the ***Ota et al.'046*** reference.

Applicant's agent respectfully requests that the Examiner withdraw the rejection of claim 16 under 35 U.S.C. 102 (b), in view of the amendments to this claim and the arguments presented above.

Applicant's agent holds that since claim 18 depend from claim 16, which is patentable, thus claim 18 is patentable since it recites more specific embodiments of the invention. Applicant's agent respectfully requests that the Examiner withdraw the rejection of claim 18 under 35 U.S.C. 102(b), in view of the amendments to claim 16 and arguments presented above.

Objections/Rejections
Under 35 U.S.C. 103

3.00 *The Examiner has rejected claims 9, 15-16 and 18 as obvious over **Ota et al.'046** U.S. 6,117,046, September 12, 2000) in view of **Gagnon '774** (U.S. 6,167,774, January 2, 2001).*

3.10 With regard to claim 9, ***Ota et al.'046*** teaches the apparatus, but lacks the specific teaching wherein the switch member is mounted to a steering handle bar of the vehicle. ***Gagnon '774*** teaches a vehicle with a similar switching device 12 mounted to a steering handle bar 32 of a vehicle. It would have been obvious to one of ordinary skill at the time of the invention to modify ***Ota et al.'046*** to mount the switching device onto a handle bar to provide a shifter that is ergonomic, easy to operate, and allows the driver to easily shift gears (Col. 1). With regard to claims 15 and 17, please see the limitations of rejected claim 7 above. With regard to claim 16, please see the limitations of rejected claims 1-3 and 9 above.

3.20 Applicant's agent has distinguished claim 1, as amended, over the ***Ota et al.'046*** reference in paragraph **2.20** above. The ***Gagnon '774*** reference merely discloses mounting a shifter to a steering handle bare of a vehicle. Thus, applicant's agent holds that claim 1, as amended, is patentably distinguished over the combination of the ***Ota et al.'046*** and ***Gagnon '774*** references for the reasons stated and discussed in paragraph **2.20** above, and that claim 1 is patentable.

Applicant's agent holds that since claim 9 depend from claim 1 which is now patentable, thus claim 9 is patentable since it recite more specific embodiments of the invention. Applicant's agent respectfully requests that the Examiner withdraw the rejection of claim 9 under 35 U.S.C. 103 (a), in view of the amendments to claim 1.

3.30 Applicant's agent has distinguished claim 10, as amended, over the ***Ota et al.'046*** reference in paragraph **2.30** above. The ***Gagnon '774*** reference merely discloses mounting a shifter to a steering handle bare of a vehicle. Thus, applicant's agent holds that claim 10, as amended, is patentably distinguished over the combination of the ***Ota et al.'046*** and ***Gagnon '774*** references for the reasons stated and discussed in paragraph **2.20** above, and that claim 10 is patentable.

Applicant's agent holds that since claim 15 depend from claim 10 which is now patentable, thus claim 15 is patentable since it recite more specific embodiments of the invention. Applicant's agent respectfully requests that the Examiner withdraw the rejection of claim 15 under 35 U.S.C. 103 (a), in view of the amendments to claim 10.

3.40 Applicant's agent has distinguished claim 16, as amended, over the ***Ota et al.'046*** reference in paragraph **2.40** above. The ***Gagnon '774*** reference merely discloses mounting a shifter to a steering handle bare of a vehicle. Thus, applicant's agent holds that claim 16, as amended, is patentably distinguished over the combination of the ***Ota et al.'046*** and ***Gagnon '774*** references for the reasons stated and discussed in paragraph **2.40** above, and that claim 16 is patentable. Applicant's agent respectfully requests that the Examiner withdraw the rejection of claim 16 under 35 U.S.C. 103 (a), in view of the amendments to claim 16 and the arguments presented in paragraph **2.40** above.

Applicant's agent holds that since claim 18 depend from claim 16 which is now patentable, thus claim 18 is patentable since it recite more specific embodiments of the invention. Applicant's agent respectfully requests that the Examiner withdraw the rejection of claim 18 under 35 U.S.C. 103 (a), in view of the amendments to claim 16.

7.00 The prior art made of record and cited by the Examiner, ***Hembree*** (US 3,894,442), ***Horii et al.*** (US 5,411,448), ***Saban et al.*** (US 5,967,252), ***Rioux et al.*** (US 6,588,537) and ***Tatewaki et al.*** (US 2005/0103144), have been reviewed by applicant's agent. None are believed to be more pertinent than the reference cited by the Examiner.

CONCLUSION

Applicant's agent respectfully traverses the Examiner's rejections and requests reconsideration. Applicants' agent respectfully submits that pending claims 1-3, 7, 9-11, 13, 15, 16, and 18 , as amended, are in condition for allowance. Applicant's agent respectfully requests passage of the application to issue.

Respectfully submitted,

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